

NOV 25 1996

Mr. Lee Tharrington
Micro Flo Company
P.O. Box 5948
Lakeland, FL 33807

Dear Mr. Tharrington:

Subject: Asulam® Liquid Herbicide
EPA Registration No. 51036-267
Application Dated November 4, 1996, Request To
Amend Labeling by Revising Labeling To
Match Labeling for Asulox® Herbicide,
EPA Registration No. 264-447 Which Is
Repackaged and Shipped as the Subject
Pesticide Product

The proposed amendments to the subject pesticide product registration have been reviewed and found acceptable under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended, provided that you:

- o Submit one (1) printed copy of the final printed label before releasing the product for shipment, under the label.

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA, Section 6(a). Your release for shipment of the product constitutes acceptance of this condition.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

BEST AVAILABLE COPY

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (7505C)

ENCLOSURE Diskette ABC#30 61 25 04-16-96

CONCURRENCES

SYMBOL							
SURNAME							
DATE							

ASULAM Liquid Herbicide

For Agricultural or Commercial Use Only. Not for Use by Homeowners.
For Postemergent Weed Control in Sugarcane, Turf, Ornamentals, Christmas Tree Plantings,
and Non-Cropland

ACTIVE INGREDIENT: Sodium salt of asulam (methyl sulfanylylcarbamate)*.....	36.2%
INERT INGREDIENTS:.....	63.8%
TOTAL:.....	100.0%

*Equivalent to 33.1% asulam or not less than 3.34 lbs. per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF ON SKIN: Wash with plenty of soap and water. If irritation persists, get medical attention.
IF IN EYES: Flush with water for 15 minutes and get medical attention if irritation persists.

For PRODUCT USE Information Call 1-800-451-8461
For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-424-9300

REC'D CIA/P/DPD1
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PRECAUTIONARY STATEMENTS

CAUTION

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Avoid contact with skin, eyes, or clothing.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining personal protective equipment. If no such instructions for washables, use detergent and hot water. Keep and wash personal protective equipment separately from other laundry.

EPA Reg. No. 51036-267

EPA Est. No. 51036-GA-1

Manufactured by:
MICRO FLO COMPANY
P.O. BOX 5948
LAKELAND, FL 33807

ACCEPTED
with COMMENTS
In EPA Letter Dated

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Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
51036-267

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard for agricultural pesticides [40 CFR 170.24 (d) (4-6)], the handler personal protective equipment requirements may be reduced or modified as specified in the Worker Protection Standard.

USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Removing clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not clean equipment or dispose of equipment washwater in a manner that will contaminate resources. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

Do not apply ASULAM Liquid Herbicide through any type of irrigation system.

Do not apply this product in a way that will contact workers, or other persons, either directly or through drift . Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulations.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry intervals. The requirements in this box apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

Personal Protective equipment required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil, or water are: coveralls, waterproof gloves and shoes plus socks.

STORAGE AND DISPOSAL

STORAGE

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Store at temperatures above 20°F.

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL

Triple rinse or equivalent. Puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

SUGARCANE

ASULAM Liquid Herbicide can be applied to either plant cane or cane grown from stubble. Apply as a water mix spray for ground applications. Use 15 to 100 gallons of water per acre, depending on local practice. For aerial application, ASULAM Liquid Herbicide should be mixed in 3 to 5 gallons of water per acre, except in Hawaii, where 5 to 10 gallons of water per acre should be used.

Addition of an adjuvant cleared for use on growing crops to ASULAM Liquid Herbicide water mix spray will improve weed control when environmental conditions are not optimal. Use either a non-ionic surfactant containing a minimum of 80% active ingredient at the rate of 1 to 2 quarts per 100 gallons (0.25 to 0.5% V/V) of water mix

spray or a crop oil concentrate containing 80 to 85% paraffin based petroleum oil and 15 to 20% non-ionic surfactant the rate of 4 quarts per 100 gallons (1% V/V) of water mix spray.

The rates of ASULAM Liquid Herbicide given below are for broadcast applications. For banded application, reduce the rate proportionally to the width of the band according to the following formula.

Band width (inches)

Row width (inches) X Broadcast rate = Band Rate/Acre

For spot treatments, use a 5% v/v ASULAM Liquid Herbicide spray (1 gallon per 20 gallons of water). Do not exceed 8 pints of ASULAM Liquid Herbicide per acre per treatment.

SUGARCANE
Single Application Per Growing Season

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Itchgrass or Raoulgrass (<i>Rottboellia exaltata</i>)	Apply when the grass is 8 inches tall or less (addition of surfactant is necessary)	8 pints/acre
Johnsongrass (<i>Sorghum halepense</i>)	Apply when the grass is between 12 to 18 inches tall. Johnsongrass should be actively growing and the average air temperature should be at least 60°F or higher.	
Paragrass or Californiagrass (<i>Brachiaria mutica</i> or <i>Panicum purpurascens</i>)	Apply when the grass is between 6 to 8 inches tall or less.	
Crabgrass (<i>Digitaria</i> spp.)	If treatment is made before the grass reaches seed head formation then the lower rate should be used. If the grass is in early seed head formation then the higher rater should be used.	6 to 8 pints/acre

Alexandergrass (<i>Brachiaria plantaginea</i>), Foxtail (<i>Setaria</i> spp.), Goosegrass (<i>Eleusine indica</i>), Broadleaf Panicum (<i>Panicum adspersum</i>), Barnyardgrass (<i>Echinochloa crusgalli</i>)	If treatment is made when the grass is 6 to 8 inches tall or less, then the lower rate should be used. If the grass is greater than 8 inches tall, then the higher rate should be used.	
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SUGARCANE

Two Applications Per Growing Season

This may be required when initial weed infestations are heavy and/or when rhizome Johnsongrass is present. Two applications may also be used when treating weed species which germinate at different times during one growing season.

WEED SPECIES	SPECIAL INSTRUCTIONS	1ST APPLICATION	2ND APPLICATION
Crabgrass (<i>Digitaria</i> spp.)	At each application the grass should be treated before seed head formation.	6 to 8 pints/acre	6 to 8 pints/acre
Itchgrass or Raoulgrass (<i>Rottboellia exaltata</i>)	At each application the grass should be 8 inches tall or less (addition of surfactant is necessary).	8 pints/acre	8 pints/acre
Johnsongrass (<i>Sorghum halepense</i>)	At each application the grass should be between 12 and 18 inches tall.	8 pints/acre	8 pints/acre

RESTRICTIONS AND PRECAUTIONS: SUGARCANE

- * ASULAM Liquid Herbicide should be used when the weeds are actively growing.
- * ~~Do not plant crops other than sugarcane in treated area.~~ Cover crops may be planted if

plowed under and not grazed.

- * Do not treat sugarcane within 90 days of harvest.
- * Do not graze or feed sugarcane fodder and forage to livestock.
- ~~* Do not rotate with any crop which is not registered for use with ASULAM Liquid Herbicide or ASULOX® Herbicide for 1 year following the last application of this chemical.~~
- * Cultivation and/or fertilizer applications or any other cultural practice that disturbs the root system of targeted weed species may result in less than optimum control when applying ASULAM Liquid Herbicide. These practices are not recommended within 7 day prior to or within 7 days after applications of ASULAM Liquid Herbicide.
- * Differences in crop tolerance to ASULAM Liquid Herbicide among sugarcane varieties has been reported in Louisiana. Contact you local County Agent or University Extension Specialist for further information.

NON-CROPLAND

ASULAM Liquid Herbicide may be used as a postemergent treatment to control weeds on non-cropland areas such as:

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|------------------------------------|--|
| Boundary fences | Railroad rights-of-way and yards |
| Fence rows | Storage areas and industrial plant sites |
| Highway and roadside rights-of-way | Utility rights-of-way and yards |
| Lumberyards | Warehouse lots |
| Pipeline rights-of-way | |

A surfactant may be added to the spray solution at 0.25% by volume. (Use an approved non-ionic surfactant.)

Apply ASULAM Liquid Herbicide as a water-mix spray for ground applications using 20 to 100 gallons of solution per acre, depending on local practice, to control the following weed species:

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Crabgrass (<i>Digitaria</i> spp.)	Apply before the grass reaches seed head formation.	1 to 2 gals/acre
Johnsongrass (<i>Sorghum halepense</i>)	Apply when the grass is 18 inches or taller. Use the higher rate in well established heavy infestations. For spot treatment in Hawaii, use the higher rate in 100 gallons of solution and apply an amount not to exceed 50 gallons of total solution per acre.	
Paragrass or Californiagrass (<i>Brachiaria mutica</i> or <i>Panicum purpurascens</i>)	Apply before the grass reaches seed head formation. For spot treatment in Hawaii, use the same rate in 100 gallons of solution and apply an amount not to exceed 50 gallons of total solution per acre.	
Western Bracken (<i>Pteridium aquilinum</i> var. <i>pubescens</i>)	Apply when the fern is in full frond.	7 to 8 pints/acre

CHRISTMAS TREE PLANTINGS

ASULAM Liquid Herbicide may be used as a postemergent treatment in Christmas Tree Plantings where Douglas Fir, Grand Fir, Nobel Fir or Scotch Pine are grown. Do not graze or feed foliage from treated areas to livestock. ASULAM Liquid Herbicide should be applied as a water mix spray. For ground application, use a minimum of 20 gallons of solution per acre; and for aerial application, use a minimum of 10 gallons of solution per acre. Do not use a wetting agent with ASULAM Liquid Herbicide.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Western Bracken (<i>Pteridium aquilinum</i> var. <i>pubescens</i>)	Apply after bud break and hardening or firming of new tree growth. Bracken should be in full frond prior to treatment.	1 gal/acre

TURF

ASULAM Liquid Herbicide can be applied on St. Augustinegrass and Tifway 419 Bermudagrass turf. Apply one application per season postemergence to the weeds listed below. Use 20 to 50 gallons of water per acre in the spray solution.

TURF SPECIES	WEED SPECIES	RATE
St. Augustinegrass	Bullgrass (<i>Paspalum supinum</i>), Crabgrass (<i>Digitaria</i> spp.), Goosegrass (<i>Eleusine indica</i>)	5 pints/acre
Tifway 419 Bermudagrass	Sandbur (<i>Cenchrus</i> spp.)	

Do not use a surfactant. Do not apply to turf which is under stress or freshly mowed.

ORNAMENTALS

ASULAM Liquid Herbicide can be applied as a single, postemergent, broadcast application on the following ornamentals:

JUNIPERS	YEWS
Juniperus andorra Juniperus chinensis Juniperus conferta Juniperus horizontalis Juniperus litoralis Juniperus sabina	Taxus cuspidata Taxus media Podocarpus macrophyllus

Treatment should be made with a minimum of 20 gallons of water per acre. Do not use a surfactant.

WEED SPECIES	SPECIAL INSTRUCTIONS	RATE
Barnyardgrass (Echinochloa crusgali), Crabgrass (Digitaria spp.), Fall Panicum (Panicum dichotomiflorum), Foxtails (Setaria spp.), Goosegrass (Eleusine indica), Horseweed (marestail) (Conyza canadensis)	Apply when the weeds are between the stages of early seedling and early seed head formation.	1 gal./acre

Local conditions may affect the use of this chemical. Consult State Agricultural Extension or Experiment Station weed specialists for specific recommendations for local weed problems and for information on possible lower dosages.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label, (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions, and (c) that the directions, warnings and other statements on this label are based upon responsible experts'

evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and of residues on food crops and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS , NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES EXPRESS OR IMPLIED AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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